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Comparison among different decommissioning funds methodologies for nuclear installations

Final Report

Country Report Slovenia

on behalf of the European Commission
Directorate-General Energy and Transport, H2

Service Contract TREN/05/NUCL/S07.55436

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Comparison among different decommissioning funds methodologies for nuclear installations

Final Country Report (WP 1/WP 3)

Slovenia

Wolfgang Irrek, Lars Kirchner, Lutz Jarczynski, Wuppertal Institute

Wuppertal, 31 October 2006

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Summary

The Republic of Slovenia has a small nuclear programme. The main nuclear facility in Slovenia is the Krsko plant designed to operate until 2023, which is a joint project of the electricity companies of Croatia (Hrvatska Elektroprivreda d.d.) and Slovenia (ELES Gen d.o.o.). Both countries also share the responsibility for decommissioning activities and decommissioning financing. Further nuclear facilities are one research reactor (TRIGA Mark II) and one central interim storage for radioactive waste operated by the Agency for Radioactive Waste Management (ARAO). In addition, there is a uranium mine and mill in the decommissioning stage at Zirovski Vrh. The Zirovski Vrh Uranium Mine terminated its regular operations in 1990 because of economic reasons.

Slovenia has no facility for final disposal of radioactive waste or spent nuclear fuel. Radioactive waste and spent fuel are stored within the plant areas of Krsko NPP and TRIGA Mark II respectively.

In 2004, the Slovene Parliament adopted a resolution on the National Energy Programme, including the following elements:

- The share of nuclear energy shall be preserved at the current level.
- The Krsko NPP shall operate at least until 2023.
- In order to secure safe and reliable operation of the Krsko NPP, adequate measures shall be implemented.
- The decision on life extension of the Krsko NPP shall be adopted in 2012 on the basis of an evaluation programme which shall start in 2008.

In 2003, the governments of Slovenia and Croatia concluded an agreement on investment, exploitation and decommissioning of the Krsko NPP. In this agreement, both countries agreed on:

- assuring funds for decommissioning financing in equal shares,
- developing a new decommissioning plan, which was finally completed in 2005 determining the decommissioning strategy based on scenario analysis, costs and timetable for decommissioning, and
- requiring each country to establish its own fund for the management and collection of financial resources for its share of decommissioning.

In principle, Slovenia and Croatia have initiated a decommissioning financing system for Krsko NPP which ensures a sufficient degree of independency from the operator and could enable to collect adequate funds for a safe decommissioning. However,

- The surcharge on the electricity price of ELES GEN of 0.3 cEuro per kWh, which is the only source of contribution to the Slovene decommissioning fund, would have to be doubled in order to be able to allocate sufficient funding for the decommissioning costs estimated.
- The Croatian half of the funding scheme is not properly working yet, and the funds collected in Croatia so far are nearly neglectable.

- An early shutdown and unexpected cost increases are not accounted for.

There are no provisions for decommissioning of the other nuclear facilities, which can lead to problems in case the national current budget does not allow to finance all decommissioning activities needed. In the case of decommissioning and restoration of Zirovski Vrh uranium mine, financing from the current budget was not sufficient to perform capitally intensive tasks. Therefore, the Slovene government secured sufficient financial resources through a loan from the European Investment Bank.

1 Introduction and overview

The Republic of Slovenia has a **small nuclear programme**. The main nuclear facility in Slovenia is the Krsko plant designed to operate until 2023, which is a joint project of the electricity companies of Croatia (Hrvatska Elektroprivreda d.d.) and Slovenia (ELES Gen d.o.o.). Both countries also share the responsibility for decommissioning activities and decommissioning financing. Further nuclear facilities are one research reactor (TRIGA Mark II) and one central interim storage for radioactive waste operated by the Agency for Radioactive Waste Management (ARAO). In addition, there is a uranium mine and mill in the decommissioning stage at Zirovski Vrh. The Zirovski Vrh Uranium Mine terminated its regular operations in 1990 because of economic reasons.

Slovenia has no facility for final disposal of radioactive waste or spent nuclear fuel. Radioactive waste and spent fuel are stored within the plant areas of Krsko NPP and TRIGA Mark II respectively.

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- assuring funds for decommissioning financing in equal shares,
- developing a new decommissioning plan, which was finally completed in 2005 determining the decommissioning strategy based on scenario analysis, costs and timetable for decommissioning, and
- requiring each country to establish its own fund for the management and collection of financial resources for its hsare of decommissioning.

Main legal acts of the Republic of Slovenia in this area are (cf. Ministry of the Environment and Spatial Planning 2005, 39ff.):

- The Ionising Radiation Protection and Nuclear Safety Act of 2002, amended in 2003 and 2004,
- The Act on the Krsko Nuclear Power Plant Decommissioning and the Krsko Nuclear Power Plant Radioactive Waste Disposal Financing Fund of 2003.

Table 1 Overview on nuclear installations in Slovenia (Status: June 2006)

Nuclear facility	Short name	Country	Kind of facility*	Output (Power in MW_{el} for NPP)	First criticality (in case of reactors)	Operational period	Operating company	Name of quoted companies holding shares in the nuclear facitlity, if any**	Percentage of shares held*** [%]	Decomm. started in year	Decomm. stage****	Analysed in this report
Krško Nuclear Power Plant		SI	NPP	632 MWe	11.9.1981	1983 - 2023	Nuclear power-plant Krško	./.				X
TRIGA Mark II		SI	RR	250 kW_{th}		1966 - today	"Jožef Stefan" Institute	./.				X
Central interim storage of radioactive waste in Brinje (CISF)		SI	storage of radio-active waste			1986 - today	Agency for rad-waste management (ARAO)	./.				X
Zirovski Vrh Uranium Mine and Mill; Waste Pile Jazbec		SI	Uranium Mine and Mill			1985 – 1991	Žirovski vrh mine, Public enterprise for uranium mine closure, Llc.	./.		1992		X

* Kind of facility: NPP = Nuclear Power Plant RR = Research Reactor

** Quoted: quoted on the stock exchange. Quoted companies directly or indirectly owning the nuclear installation or at least a part of it.
*** Percentage of direct or indirect shares held by companies quoted on the stock exchange.

**** Decomm. = Decommissioning. Decommissioning stages:
Operating: Still in operation; not shut down yet
0 Decommissioning announced
1 Decommissioning to stage 1
2 Decommissioning to stage 2
3 Decommissioning to stage 3
3* Decommissioning to stage 3 without civil engineering
-x Decommissioning in progress towards stage x
Complementary information:
a partly converted into a museum
b converted into a spent fuel facility
c Equipment dismantled, building to be reused
d Contains damaged fuel elements
e Chimney being partly dismantled
f used as radioactive waste store
Source: Ministry of the Environment and Spatial Planning 2005, Colenco/Iberinco questionnaire.

2 Decommissioning strategies and costs

2.1 Current and past decommissioning activities

The basic activities of the public company of Zirovski Vrh Uranium Mine and Mill (with a staff of 38 people) are the planning and implementation of the closure of the site, including environmental protection measures and measures against the consequences of the uranium mine exploitation. It is planned to complete decommissioning and restoration work by the end of 2009.

2.2 Future decommissioning strategies

The agreement between Slovenia and Croatia on the Krsko NPP of 2003 required the preparation of a decommissioning plan, which was prepared in 2004. The decommissioning programme was finally adopted in 2005. An update has to be made at least every five years.

A scenario analysis of decommissioning costs was an important part of the development of the decommissioning plan (cf. Table 2; Zeleznik et al. 2004; but also the analysis by Skantana/Medakoviv/Debrecin). Sensitivity analyses were carried out which led to an optimised scenario SID-45 which was finally chosen as a basis for the deocmmissioning strategy decided on in 2004 and which came into force in 2005 (joint Slovene-Croatian agreement on this strategy). According to this scenario, total undiscounted costs of decommissioning of Krsko NPP are estimated at 1,149.3 million $Euro_{2002}$, i. e. about 0.6 cEuro per expected kWh produced.

The time schedule of this scenario SID-45 assumes the following decommissioning steps (Zeleznik et al. 2004):

2017 Start of disposal of low and intermediate level waste

2023 Start of decontamination and dismantling

2024 Start of operation of dry storage for spent fuel

2030 Final decision on export or disposal of spent fuel

2036 End of decontamination, dismantling and demolition

2042 End of disposal of low and intermediate level waste

2065 Start of operation of disposal and end of dry storage operation

2066 Export

2074 End of operation of spent fuel disposal.

There is no decommissioning plan for TRIGA Mark II at Jozef Stefan Institute yet, but foreseen for 2007. It has been estimated that not more than 10 tons of low and intermediate level waste would be produced in decommissioning. It is not decided yet, if

complete dismantling will be pursued (immediate or deferred), or if the reactor structures and the bulding will be converted for other research or commercial activities.

CISF is to be decommissioned after start of operation of a low and intermediate level waste repository in 2013/2014, for which a siting process is ongoing. Maybe, it will be in operation until Krsko NPP will be shut down. There is no decommissioning plan or cost estimate for CISF yet, but ARAO expect that costs will be very low.

Table 2 Overview on expected decommissioning costs for Krsko NPP (632 MWel) in Slovenia according to the scenario "SID-45 domestic disposal" of the analysis conducted by ARAO and APO d.o.o. in the year 2004, partly based on an NIS study of 1996 (in undiscounted prices of 2002)

Decommissioning activity	**Years the activity is expected to take place**	**Total decommissioning costs [Mio. Euro]**	**Annuity of decommissioning costs in relation to output over lifetime [ct/kWh; 4%]**	**Remarks**
LILW disposal	2017 - 2042	186.0		LILW repository is expected to be operational from 2013
Spent fuel transport and storage	2024 - 2065	189.3		Dry storage
Spent fuel disposal	2065 - 2074	567.7		Swedish SKB model for KBS-3 concept adopted for calculation for disposal in deep geological formations.
NPP dismantling	2023 - 2036	206.3		Based on NIS model of 1996, with some changes.
TOTAL	**2004 - 2074**	**1,149.3**	**0.6**	Annuity roughly calculated by assuming 7,500 h/year operation, 40 years lifetime and 4% discount rate. This own calculation matches the calculation done in Slovenia, with the surcharge on the electricity price being currently calculated at about 0.3 ct/kWh (3.5% discount rate). Roughly the same amount would have to be contributed by Croatia. Therefore, for the period 2004 – 2023, the total annual fee to be collected in Slovenia and Croatia based on a calculation of annuities of decommissioning costs would be 0.6 ct/kWh in order to cover expected decommissioning costs.

Source: Zeleznik et al. 2004; own calculation by Wuppertal Institute.

Table 3 Expected total costs of future decommissioning of nuclear installations in Slovenia (in prices of 2002)

Short name of nuclear facility	**Kind of facility**	**Years decommissioning activities are expected to take place**	**Total decommissioning costs estimated [Mio. Euro]**	**Annuity of estimated decommissioning costs in relation to output over lifetime [ct/kWh for NPP; 4%]**	**Remarks**
Krško Nuclear Power Plant	NPP	< 2074	1,149.3	0.6	Cf. Table 2 for more details.
TRIGA Mark II	Research reactor	Not decided yet	Not calculated yet		Decommissioning plan has to be developed by 2007.
Central interim storage of radioactive waste in Brinje (CISF)	storage of radioactive waste	> 2013, maybe 2023	Not calculated yet		CISF to be decommissioned after start of operation of LILW repository in 2013/2014, for which a siting process is ongoing. Costs will be very low probably.
Zirovski Vrh Uranium Mine and MilII; Waste Pile Jazbec	Uranium Mine and Mill	1992 - 2009	Not known		

Source: Zeleznik et al. 2004; Ministry of the Environment and Spatial Planning 2005 and 2006; Colenco/Iberinco questionnaire.

3 Funds and fund management

3.1 Setting aside funds

Provisions for Krsko NPP are set up according to the scheme presented in Figure 1 seperately for the Slovene and the Croatian half of decommissioning financing needs, i. e. the agreement means that separate Slovene and Croatian external, restricted funds for decommissioning of Krsko NPP should be established.

In Slovenia, such a fund has been already established in 1996, and revised by the Act on the Krsko Nuclear Power Plant Decommissioning and the Krsko Nuclear Power Plant Radioactive Waste Disposal Financing Fund in 2003. It is currently fed by a surcharge on the electricity price of 0,30 cEuro per kWh. Until August 2006, about 125 million Euro have been collected so far.

According to the cost estimate presented in the previous chapter for the selected strategy SID-45, the total annual contributions to be collected in Slovenia and Croatia in the period 2004 to 2023, based on a calculation of annuities of decommissioning costs, would be about 28.3 million Euro per year (own calculation by Wuppertal Institute with 3.5% discount rate; cf. the 28.5 million Euro calculated by Zeleznik et al. 2004). Assuming an annual operation of 7,500 hours per year, this would mean that a levy of about 0.6 cEuro per kWh would be needed to fully cover expected decommissioning costs. This calculation shows that the surcharge in Slovenia would have to be doubled in order to be able to collect sufficient financial means for decommissioning.

In Croatia, there is no external fund yet. This had led to a letter by the Slovene Minister of Economy to Croatia in mid-June 2006 who gave Croatia 30 days to begin fulfilling its obligations regarding decommissioning of Krsko NPP and setting up a dedicated Croatian decommissioning fund. The Croatian response to this letter on 16 August 2006 did not satisfy the Slovene minister who said that the Croatian letter would “complicate matters” (Slovene news agency STA, 31 August 2006). Croatia argued that they had already accumulated 8.6 million Euro on a separate central budget item dedicated for decommissioning. Slovenia claims that this would not be enough and that Croatia would need to establish a special, dedicated, separate fund instead of just having a special item within the current budget. According to the calculation above, and since Slovenia and Croatia both receive half of the electricity production of Krsko NPP, also in Croatia a levy of about 0.6 cEuro per kWh or an annual sum of about 28.3 million Euro per year would be needed to fully cover expected decommissioning costs.

There are no provisions for decommissioning of the other facilities:

- Cost coverage plan for TRIGA Mark II will be submitted together with the decommissioning plan in 2007.
- Costs associated with decontamination of CISF shall be covered from the budget of ARAO; however, it is estimated that costs will not be much in total. A decommissioning plan does not exist yet. Operation of CISF is financed partly through the na-

tional budget and partly through the Fund for the Decommissioning of the Krsko NPP.

- Until 2002, decommissioning and restoration of Zirovski Vrh uranium mine was provided through the national current budget. However, such financing was not sufficient to perform capitally intensive tasks (Ministry of the Environment and Spatial Planning 2005, 55). Therefore, the Slovene government secured sufficient financial resources through a loan from the European Investment Bank. The budget will assure the completion of work by the end of 2009. The financial resources for institutional monitoring will be provided from Slovene current national budget.

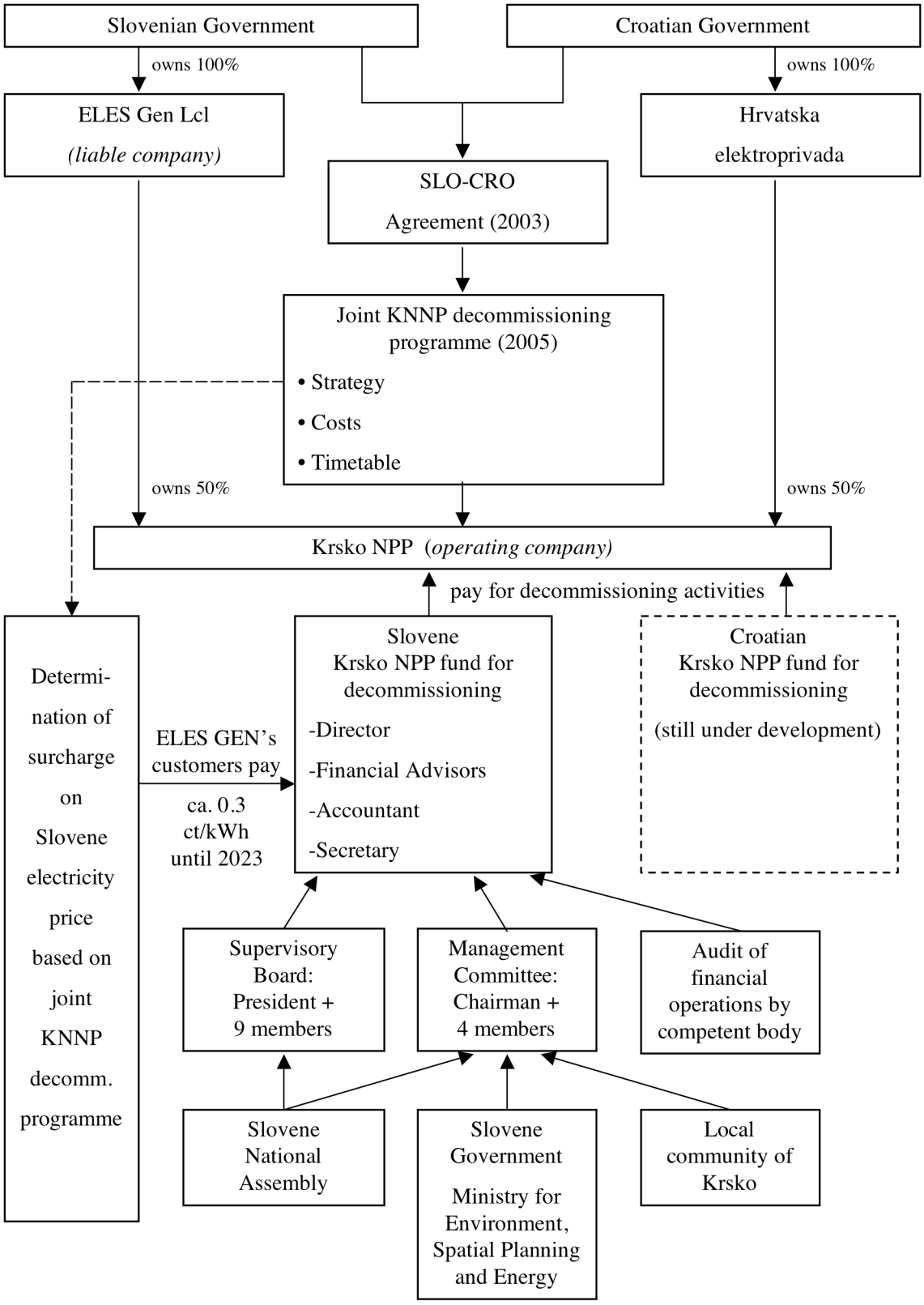

Figure 1: The decommissioning financing system for Krsko NPP in Slovenia

3.2 Management of funds

Since there is no dedicated, external fund in Croatia yet, the following description of fund management focuses on the Slovene Financial Fund for Decommissioning of Nuclear Power Plant Krsko (cf. Figure 1; www.sklad-nek.si). How the fund shall work is determined by the Act No. 47/2003 on the Krsko Nuclear Power Plant Decommissioning and the Krsko Nuclear Power Plant Radioactive Waste Disposal Financing Fund.

According to the unofficial translation of this act, the fund is a legal person and acts on its own behalf and for its own account, independent from the operator of the plant. ELES GEN d.o.o. is liable for the monthly payments of financial resources to the fund based on the above-mentioned surcharge on the electricity price. The amount to be included into the price has to be defined on the basis of the joint decommissioning programme. The fund is managed by a management committee, which is composed of a chairman and of four members among which the chairman and two of the members are appointed by Slovenia's National Assembly, one member by the government and one member by the authority of the local community where the Krsko NPP has its site. The fund is represented by its director who is responsible for the Fund's operations and is appointed by the government. He is assisted by financial advisors, an accountant and a secretary. The fund's operations are supervised by a Supervisory Committee composed of a president and of nine members appointed and relieved of duty by Slovenia's National Assemply. The Supervisory Committee has to report on its work to the National Assembly once a year. Financial operations of the fund are to be monitored by a body competent for the public finance economic and financial audit. The consent to the Fund's Statue, to its investment policy, to the annual accounts and to the Fund's operations report have to be given by the government.

Investment is permitted in first-rate securities and deposits. Basic investment principles are safety, profitability and liquidity, with safety being the most important factor in order to be able to provide adequate financial resources for a safe decommissioning at the time needed (www.sklad-nek.si, 13 July 2006). There are currently the following more detailed limitations with regard to investment of the financial means of the fund, which have been approved by the government:

- minimum 30% in state bonds
- not more than 5% in stock
- not more than 15% in other bonds
- not more than 5% in stocks of one issue
- approximately 10% in securities on foreign financial markets.

At the end of the year 2003, the fund had invested 49% of the financial means in state bonds, 13% in other bonds and 5% in stocks. 33% were placed in larger Slovene banks. In 2003, the fund received an interest on its investment of 9.6%. On average, between 1998 and 2003, the fund yielded 8.56%.

3.3 Special cases: Fall-back option and transfer of ownership

An early shutdown of Krsko NPP is not accounted for in the decommissioning financing scheme as it has been described in the previous subchapters. Transfer of ownership should not change the funding principles but might affect the relations between Slovenia and Croatia with regard to Krsko NPP.

Table 4 Base for decommissioning funds required

Short name of nuclear facility	Kind of facility: NPP = nuclear power plant RR = Research reactors Others: please specify	Please check if decommissioning funds are based on overnight / undiscounted decommissioning costs	Please check if decommissioning funds are based on net present value / discounted decommissioning costs	Discount rate used for discounting, if any	Reference date used for discounting	Remarks
Krško Nuclear Power Plant	NPP		X	3.5% (real)	Costs are distributed over time according to expectations when costs will have to be paid, and then discounted to the present year	Scenario “SID-45 domestic disposal” of the analysis conducted by ARAO and APO d.o.o. in the year 2004, partly based on an NIS study of 1996.
Research reactor TRIGA Mark II	RR	no provisions	no provisions			Payment from current budget.
Central interim storage of radioactive waste in Brinje	storage of radioactive waste	no provisions	no provisions			Payment from current budget.
Zirovski Vrh Uranium Mine and MilII; Waste Pile Jazbec	Uranium Mine and Mill	no provisions	no provisions			Payment from current budget.

Source: Zeleznik et al. 2004; Ministry of the Environment and Spatial Planning 2005 and 2006, Colenco/Iberinco questionnaire.

Table 5 Decommissioning funds accumulated in relation to expected total costs of future decommissioning of nuclear installations in Slovenia (in prices of 2002)

Short name of nuclear facility	**Kind of facility:** **NPP = nuclear power plant** **RR = Research reactors** **Others: please specify**	**Total decommissioning costs estimated [Mio. Euro]**	**Provisions accumulated by 31-12-2004 [Mio. Euro]**	**Provisions accumulated in relation to expected costs [%]**	**Years of operation until 31-12-2004 in relation to total expected lifetime [%]**	**Remarks**
Krško Nuclear Power Plant	NPP	1,149.3 (undiscounted) 338.5 (discounted)	115	10.0% (undiscounted) 34.0% (discounted)	52.5%	It should be noted that these are only provisions allocated for the Slovene 50% share in costs, with start of the collection in 1996, i.e. 13 years after start of operation. Costs are according to the scenario “SID-45 domestic disposal” fromf the analysis conducted by ARAO and APO d.o.o. in the year 2004, partly based on an NIS study of 1996.
TRIGA Mark II	RR	Not calculated yet	0	0.0%	Not decided yet	Decommissioning and financing plan has to be developed by 2007.
Central interim storage of radioactive waste in Brinje	storage of radioactive waste	Not calculated yet	0	0.0%	Not decided yet	CISF to be decommissioned after start of operation of LILW repository in 2013/2014, for which a siting process is ongoing.
Zirovski Vrh Uranium Mine and Milll; Waste Pile Jazbec	Uranium Mine and Mill	Not known.	0	0.0%	100%	

Source: Zeleznik et al. 2004; Ministry of the Environment and Spatial Planning 2005 and 2006, Colenco/Iberinco questionnaire.

Table 6 Management of decommissioning funds in Slovenia

Short name of nuclear facility	Kind of facility: NPP = nuclear power plant RR = Research reactors Others: please specify	Provisions accumulated by 31-12-2004 [Mio. Euro]	… of which has been accumulated within the own assets of the operator of the facility or its mother company [Mio. Euro]	… of which has been accumulated by the operator of the facility or its mother company within a separated account / restricted fund [Mio. Euro]	… of which has been accumulated in an external fund under public control [Mio. Euro]	… of which has been accumulated in an external fund under mixed private-public control [Mio. Euro]	Share of funds the operator of the facility can access for other activities until the funds are needed for their original decommissioning purpose [%]	Remarks
Krško Nuclear Power Plant	NPP	115			115		0%	It should be noted that these are only provisions allocated for the Slovene 50% share in costs, with start of the collection in 1996, i.e. 13 years after start of operation. No provisions collected by Croatia yet; fund is under development.
Research reactor TRIGA Mark II	RR	0	0	0	0	0		
Central interim storage of radioactive waste in Brinje	storage of radioactive waste	0	0	0	0	0		
Zirovski Vrh Uranium Mine and MillI; Waste Pile Jazbec	Uranium Mine and Mill	0	0	0	0	0		

Source: Ministry of the Environment and Spatial Planning 2005 and 2006, Colenco/Iberinco questionnaire.

Table 7 Investment of decommissioning funds until they are used for their original purpose in Slovenia

Short name of nuclear facility	**Kind of facility:** **NPP = nuclear power plant** **RR = Research reactors** **Others: please specify**	**Provisions accumulated by 31-12-2004 [Mio. Euro]**	**… of which have been invested in secure state bonds (with percentages of 2003 assumed to be valid for 2004, too) [Mio. Euro]**	**… of which have been invested in other assets with fixed interest rates (with percentages of 2003 assumed to be valid for 2004, too) [Mio. Euro]**	**… of which have been lent to associated or joined companies or to third parties (with percentages of 2003 assumed to be valid for 2004, too) [Mio. Euro]**	**… of which have been invested in other means (shares, mergers & acquisitions, etc.) (with percentages of 2003 assumed to be valid for 2004, too) [Mio. Euro]**	**Interest on invested financial means from decommissioning funds in 2003 [%]**	**Interest on invested financial means from decommissioning funds in period 1998 - 2003 [%]**	**Remarks**
Krško Nuclear Power Plant	NPP	115 (105.2 in 2003)	56	53	0	6	9.60%	8.56%	There are specific investment requirements by law.
Research reactor TRIGA Mark II	RR	0	0	0	0	0	0	0	
Central interim storage of radioactive waste in Brinje	storage of radioactive waste	0	0	0	0	0	0	0	
Zirovski Vrh Uranium Mine and Milll; Waste Pile Jazbec	Uranium Mine and Mill	0	0	0	0	0	0	0	

Source: http://www.sklad-nek.si/eng/index.html (12 July 2006); Ministry of the Environment and Spatial Planning 2005 and 2006, Colenco/Iberinco questionnaire.

4 Transparency of the funding schemes to the public

All important information and annual reports on the Krsko NPP and its decommissioning financing system are publically available, part of it even in English. The Slovene parliament as well as the local community of Krsko can at least partly influence and control decommissioning financing of the plant.

5 Stakeholder analysis

The main stakeholders in Slovenia (and Croatia) are:

- Slovene and Croatian Government (in particular, Ministry for Environment, Spatial Planning and Energy of Slovenia),
- Slovene and Croatian Parliament,
- The local municipality of Krsko,
- The operator of Krsko NPP and its shareholders, the electricity companies of Croatia (Hrvatska Elektroprivreda d.d.) and Slovenia (ELES Gen d.o.o.),
- The public company Žirovski vrh mine, Public enterprise for uranium mine closure, Llc.,
- Jozef Stefan Institute,
- Slovene and Croatian Financial Fund for Decommissioning of Krsko NPP and its supervisory and management boards,
- Slovene Nuclear Safety Administration (SNSA),
- Agency for Radioactive Waste Management (ARAO),
- NGOs.

In general, stakeholders in Slovenia are quite satisfied with the Krsko decommissioning financing system, except the lack of contribution from Croatia so far. ARAO thinks that independence of fund management and cost approval as well as control of fund investment by Parliament via the supervisory board to which the fund has to report annually would be important advantages of the Slovene system. Such an independent fund management ARAO recommends also to other countries.

6 Conclusions and recommendations

In principle, Slovenia and Croatia have initiated a decommissioning financing system for Krsko NPP which ensures a sufficient degree of independency from the operator and could enable to collect adequate funds for a safe decommissioning. However,

- The surcharge on the electricity price in Slovenia would have to be doubled in order to be able to allocate sufficient funding for the decommissioning costs estimated.
- The Croatian half of the funding scheme is not properly working yet, and the funds collected in Croatia so far are nearly neglectable.
- An early shutdown and unexpected cost increases are not accounted for.

There are no provisions for decommissioning of the other nuclear facilities, which can lead to problems in case the national current budget does not allow to finance all decommissioning activities needed. In the case of decommissioning and restoration of Zirovski Vrh uranium mine, financing from the current budget was not sufficient to perform capitally intensive tasks. Therefore, the Slovene government secured sufficient financial resources through a loan from the European Investment Bank.

7 References

Oral and written information by stakeholders.

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Annex

Slovene Act on the Krsko Nuclear Power Plant Decommissioning and the Krsko Nuclear Power Plant Radioactive Waste Disposal Financing Fund, 2003

ACT ON THE KRŠKO NUCLEAR POWER PLANT DECOMMISSIONING AND THE KRŠKO NUCLEAR POWER PLANT RADIOACTIVE WASTE DISPOSAL FINANCING FUND

officially consolidated text-
published in the Official Gazette of the Republic of Slovenia, No. 47/2003

UNOFFICIAL TRANSLATION

Article 1

A fund for financing the decommissioning of the Krško Nuclear Power Plant (hereinafter: KNPP), the storage and the final disposal of the KNPP intermediate- and low- radioactive waste as well as of the spent nuclear fuel shall be established (hereinafter: the Fund). For the purposes of this Act, decommissioning shall mean removal and final disposal of all radioactive components and materials. All of the components are to be decontaminated and safely stored.

Article 2

The Fund is a legal person and acts on its own behalf and for its own account. The Fund shall operate under the following name: Fund for financing the decommissioning of the Nuclear Power Plant Krško and for disposal of radioactive waste of the Krško Nuclear Power Plant. The Fund's headquarters shall be located at Krško.

Article 3

Financial resources collected under this Act shall be used for the purposes of:
- the safe storage and final disposal of the KNPP spent nuclear fuel and radioactive waste;
- safe KNPP decommissioning.

Article 4

For the purposes of Article 3 of this Act, the Fund's financial resources shall be ensured through the difference existing between the own price for any kWh of electricity as produced by the KNPP and delivered to ELES GEN d.o.o., and the selling price which the latter obtains on the electricity market. As with the date of 1 January 2004, the liable authority for the accounting and monthly payments of financial resources to the Fund, by virtue of Paragraph 1 of this Article, is ELES GEN d.o.o. The amount to be included into the price shall be defined on the basis of the programme referred to in Article 6 of this Act, however, until its adoption the actual price is set at 0.61 SIT per kWh produced by the KNPP.

Article 5

Payments to the Fund by KNPP are done on a monthly basis. The way of accounting and the system of payments to the Fund shall be laid down by the minister responsible for energetics within two months following the entry into force of this Act.

Article 6

With a view to implementing the objectives referred to in Article 3, the Government of the Republic of Slovenia (hereinafter: the Government) shall by 31 December 2003 adopt amendments to the existing KNPP decommissioning programme to remain valid until adoption of a joint KNNP decommissioning programme in conformity with the actual Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on the regulation of the status and other legal issues regarding investments to KNPP, including its exploitation and decommissioning (hereinafter: the Agreement). The modified programme contains also presentation of the possible decommissioning strategies, including evaluation of the necessary financial resources and a relevant time-table prepared by the KNPP.

Article 7

The Fund is managed by the Management Committee. The latter shall be composed of a chairman and of four members among which the chairman and two of the members are appointed by Slovenia's National Assembly, one member by the Government and one member by the authority of the local community where the KNPP has its site. The Fund's operations shall be supervised by the Supervisory Committee composed of a president and of nine members appointed and relieved of duty by Slovenia's National Assembly. The Fund is represented by its Director who is responsible for the Fund's operations and is appointed by the Government. The Supervisory Committee shall report on its work to the National Assembly once a year.

Article 8

Financial operations of the Fund shall be monitored by a body competent for the public finance economic and financial audit.

Article 9

The Management Committee shall adopt the Fund's Statute in order to regulate:
1. the Fund's internal organization and its way of functioning;
2. the competencies concerning representation;
3. the Management Committee and the Supervisory Committee members' and the Director's duties and mandates;
4. other relevant issues concerning organization and functioning of the Fund.

The consent to the Fund's Statute, to its investment policy, to the annual accounts and to the Fund's operations report shall be given by the Government.

Article 10

Investments shall be permitted in the first-rate securities and deposits.

Article 11

The Fund shall be constituted within 60 days following the entry into force of this Act at the latest. Implementation of all steps regarding establishment of the Fund shall be within the responsibility of the Government.

Article 12

This Act shall enter into force on the fifteenth day following its publication in the Official Gazette of the Republic of Slovenia.

Act amending the Act on the Krško Nuclear Power Plant Decommissioning and the Krško Power Plant Radioactive Waste Disposal Financing Fund (Official Gazette of the Republic of Slovenia, No 24/2003) contains the following transitional and final provision:

Article 3

The Fund for financing the KNPP decommissioning and the KNPP radioactive waste disposal referred to in Article 1 of the Act shall continue to carry out the fund's tasks as stipulated in Article 11, Paragraph 3 of the Agreement. The amount of resources paid by ELES GEN d.o.o. to the mentioned fund shall remain unchanged until adoption of a joint decommissioning programme as referred to in Article 11 of the Agreement.

Article 4

This Act shall enter into force on the fifteenth day following its publication in the Official Gazette of the Republic of Slovenia.